1051-76-125   **Nusret Balci**, **Ciprian Foias** and **Michael S Jolly*** (`msjolly@indiana.edu`), Department of Mathematics, Indiana University, Bloomington, IN 47405. *2-D Turbulence for Time-dependent Forces with Large Gaps in their Spectra.* Preliminary report.

We discuss the existence of both an inverse cascade of energy and a direct cascade of enstrophy for the 2-D Navier-Stokes equations driven at two widely separated scales. It is assumed that on average the bulk of the time-dependent force is at the smaller scales. (Received August 21, 2009)